

CLAIMS

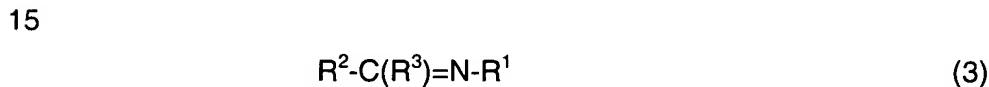
1. Process for the preparation of an enantiomerically enriched Schiff base wherein
5 an amine with formula 1



is contacted with a carbonyl compound, with formula 2



wherein the amine and/or the carbonyl compound is a chiral compound, to form a mixture of the enantiomers or diastereomers of the corresponding Schiff base with formula 3



wherein, if the amine is the chiral compound R^1 represents a chiral group chosen from an alkyl, (hetero)aryl, alkoxy, (hetero)aryloxy, (di)alkylamino, acylamino or (hetero)arylamino group, R^2 represents an (hetero)aryl group and R^3 represents H, if the carbonyl compound is the chiral compound R^2 and R^3 each independently represent H, an alkyl, or (hetero)aryl, group with the proviso that the carbonyl compound is chiral and R^1 represents an (hetero)aryl group or an (hetero)aryl substituted C2-C10 alkyl group wherein the (hetero)aryl substituent is not in the α -position relative to the imine-N, and if both the amine and the carbonyl compound are chiral compounds, R^1 , R^2 and R^3 in combination may have the same meanings as given above for both the chiral amine and the chiral carbonyl compound situation, and the mixture of enantiomers of the Schiff base is subjected to preparative chromatography on a stationary phase whereby separation of the enantiomers of the Schiff base is obtained.

2. Process according to claim 1, wherein a mixture of diastereomers of the Schiff base is subjected to preperative chromatography.
3. Process according to claims 1 or 2, wherein a chiral stationary phase is used.

4. Process according to any one of claims 1 - 3, wherein the preparative chromatography used is Simulated Moving Bed chromatography.
5. Process according to any one of claims 1-4, wherein the chiral center in the Schiff base is at the α - or β -position relative to the imine-N, most preferably at the α -position.
6. Process according to any one of claims 1-5, wherein the amine is the chiral compound and the carbonyl compound is achiral.
7. Process according to any one of claims 1-6, wherein the amine is chiral and which process further comprises hydrolyzing the enantiomerically enriched Schiff base to form the corresponding enantiomerically enriched amine.
- 10 8. Process according to claim 6 or 7, wherein the carbonyl compound is a benzaldehyde.
9. Process according to any one of claims 1-5, wherein the carbonyl compound is the chiral compound.
- 15 10. Process according to claim 10, wherein the amine is achiral.
11. Process according to claim 9 or 10, which process further comprises hydrolyzing the enantiomerically enriched Schiff base to form the corresponding enantiomerically enriched carbonyl compound.
12. Process according to claim 9, wherein the carbonyl compound is an aldehyde.
- 20 13. Process according to any one of claims 1-12, wherein the concentration of Schiff base in the mixture to be resolved is between 0.5 and 10 % by (w/v).
14. Process according to any one of claims 1-13, wherein preparative liquid chromatography is used and wherein the mixture of the enantiomers of the Schiff base is dissolved in an alcohol, a hydrocarbon or any mixture thereof.
- 25 15. Process according to any one of claims 1-13, wherein preparative super- critical chromatography is used and wherein the mixture of enantiomers of the Schiff base is dissolved in a mixture of carbon dioxide and a polar protic solvent.
16. Process according to any one of claims 1-15, wherein the undesired enantiomer of the Schiff base is subjected to racemisation and subsequently the mixture of enantiomers obtained is recycled to the preparative chromatographic step.
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